

## REVISIONS TO CLAIMS

1. (currently amended) Discharge vessel (1) with at least one end part (2) and a discharge cavity (3), characterized in, that at least one coating layer (4) is located and gas-tight connected between an end part (2) of said discharge vessel (1) and a sealant (5) and/or between a sealant (5) and an end closure member (9)  
wherein the coating is between the sealant and the end of the discharge vessel.

2. (original) Discharge vessel (1) according to claim 1, characterized in, that the gastight bonding of the coating layer (4) to the discharge vessel (1), to a sealant (5), and/or to an end closure member (9) is stronger compared to the direct gas-tight bonding of said sealant (5) to said end closure member (9) and/or discharge vessel (1).

3. (previously presented) Discharge vessel (1) according to claim 1, characterized in, that the coating layer (4) has an expansion coefficient in the range between  $4 \cdot 10^{-6} \text{ K}^{-1}$  and  $12 \cdot 10^{-6} \text{ K}^{-1}$

4. (previously presented) Discharge vessel (1) according to claim 1, characterized in, that the coating layer (4) is chemically resistant towards oxides and iodides.

## REVISIONS TO CLAIMS

1 5. (previously presented) Discharge vessel (1) according to claim 1, characterized in, that  
2 the coating layer (4) is of a material comprising at least Mo.

1 6. (previously presented) Discharge vessel (1) according to claim 1, characterized in, that  
2 the coating layer (4) covers at least the end parts (2) of the discharge vessel (1) of the end  
3 closure device (7).

1 7. (previously presented) Gas-tight high-pressure burner (6) with coating layer (4)  
2 comprising at least one discharge vessel (1) according to claim 1 and at least one end  
3 closure device (7) and at least one feed-through (8).

1 8. (Currently amended) Gas-tight high-pressure burner (6) according to claim 7  
2 comprising at least one end closure member (9) with at least one feed-through (8),  
3 wherein the end closure member (9) has at least one ~~through-going~~ feed-through opening,  
4 whereby the feed-through opening cross-section varies along the end closure member (9)  
5 longitudinal axis.

1 9. (Currently amended) Gas-tight high-pressure burner (6) with coating layer (4)  
2 comprising

## REVISIONS TO CLAIMS

3        a discharge vessel (1) with at least one end part (2) and a discharge cavity (3),  
4        characterized in, that at least one coating layer (4) is located and gas-tight connected  
5        between an end part (2) of said discharge vessel (1) and a sealant (5) and/or between a  
6        sealant (5) and an end closure member (9) and  
7        at least one end closure device (7) and at least one feed-through (8) Lamp,  
8        ~~comprising at least one gas-tight high-pressure burner (6) according to claim 7, whereby~~  
9        wherein the lamp is arranged in an automotive headlamp unit.

1        10. (previously presented) Method of manufacturing a gas-tight high-pressure burner (6),  
2        comprising

- 3        a) at least one end closure member (9),
- 4        b) at least two feed-through members (8),
- 5        c) at least one connection means (10),
- 6        d) at least one sealant (5), and
- 7        e) at least one discharge vessel (1) with a coating layer (4),

8        wherein the manufacturing method comprises the steps:

9            i) filling said discharge vessel (1) with an ionisable filling through at least one  
10          feed-through opening, and

11          ii) closing said feed-through opening by arranging a feed-through (8) in said

12          opening followed by gas-tight connecting said feed-through (8) to the end closure

## REVISIONS TO CLAIMS

device (7) and/or to the discharge vessel (1) with connection means, whereby a gas-tight high-pressure burner (6) is obtained.

11. (currently amended) A headlight suitable for use in a motor vehicle comprising a

lamp, the lamp comprising a gas-tight high-pressure burner, the burner comprising

- at least one metal halide discharge vessel comprising

- at least one end part; and

- a discharge cavity;

- at least one end closure member;

- at least one sealant between the end closure member and the end part;

- at least one gas-tight connection between ~~the~~ a feed through member and the end closure member;

- at least one gas-tight connected coating covering one or more of the end part of the discharge vessel, the sealant, and the end closure device, gas-tight bonding of the coating being stronger than gas-tight bonding of the sealant to the end closure member and/or the discharge vessel.

## REVISIONS TO CLAIMS

1 12. (previously presented) The headlight of claim 11 wherein the coating layer has an  
2 expansion coefficient in the range between  $4 \cdot 10^{-6} \text{ K}^{-1}$  and  $12 \cdot 10^{-6} \text{ K}^{-1}$  for temperatures in  
3 the range 298 K to 2174 K.

13. (previously presented) The headlight of claim 11 wherein the coating layer is  
chemically resistant towards oxides and iodides.

14. (currently amended) The headlight of claim 11 wherein the coating layer comprises a  
material selected from the group comprising at least W, Mo, and/or Pt.

1 15. (previously presented) The headlight of claim 11, wherein the sealant and the  
2 connection comprise materials that are needed for welding, laser welding, resistance  
3 welding, soldering, brazing, bonding with adhesive materials, primary shaping, sintering,  
4 sealing or any combination thereof.

1 16. (previously presented) The headlight of claim 11, further comprising  
2 – at least one opening through the end closure and the end part; and

## REVISIONS TO CLAIMS

3 at least one feed through member passing through the opening, the feed through being  
4 suitable for introducing first a filling into the discharge vessel after the end closure is  
5 sealed to the discharge vessel, and second an electrode after the discharge vessel is filled.

1 17. (previously presented) The headlight of claim 16, wherein the opening has an outer  
2 cross section and an inner cross section, and the outer cross section is greater than or  
3 equal to the inner cross section.

1 18. (previously presented) The headlight of claim 11, wherein the end closure is made of  
2 a functionally graded cermet material including first and second materials denominated A  
3 and B arranged such that — in some portions — concentration of compound A  
4 substantially increases where component B decreases causing gradients of both A and B,  
5 while an outer layer has a constant concentration of A and B.

19. (previously presented) The headlight of claim 18, wherein compound A comprises  
 $\text{Al}_2\text{O}_2$  and compound B comprises Mo.

20. (cancelled)

1 21. (previously presented) A method of assembling a lamp comprising:

## REVISIONS TO CLAIMS

- 2    – first sealing at least one cap (9) to a discharge vessel, the cap comprising an opening,  
3       the sealing process comprising increasing temperature and/or pressure within the  
4       vessel and using a sealant and a coating;
- 5    – after sealing, filling the vessel with at least one desired salt and/or at least one desired  
6       filling gas, through the opening;
- 7    – positioning at least one electrode in opening after the vessel is filled; and
- 8    – second sealing the electrode in the opening using a technique resulting in  
9       substantially less temperature and pressure increase within the vessel than was  
10      required by the first sealing, so that the sealing and coating from the first sealing are  
11      not damaged by temperature and pressure from contents of the vessel.

22. (previously presented) Discharge vessel (1) according to claim 1, characterized in,  
that the coating layer (4) is of a material comprising at least Pt.

23. (previously presented) Discharge vessel (1) according to claim 1, characterized in,  
that the coating layer (4) is of a material comprising at least W.